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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

LEIVA, FRANK M

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/734,932	Applicant(s) HO ET AL.	
	Examiner FRANK M. LEIVA	Art Unit 3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-16, 23-26 and 33-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-16, 23-26 and 33-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/15/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the limitation in claim 1 in regards to a selection of the specific area for a second time and determination of it depending of difficulty level is not represented in the drawings. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 13-16, 23-26 and 33-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Success Maker Math Concepts and Skills, Teacher's Handbook, Computer Curriculum Corporation, February 1993, hereinafter MC&S. in view of Kerwin (US 5,616,033).**

4. Regarding the combination of analogous art; MC&S and Kerwin, both inventions disclose a computer teaching method and the use of repetition of learnt materials so that the person can retain in memory the subject and better use the concepts learned.

1. **Regarding claims 13, 23 and 44;** MC&S discloses:

A computer-implemented method and computer readable media for helping a user learn a subject, the subject having a plurality of areas, (p. 1 and 2), Success Maker by Computer Curriculum Corp. is a network computer system for aiding teachers in presenting materials to students.

Retrieving test results from testing the user on at least one area of the subject after materials on the subject have been presented for the user to learn, (p. 9), exercise sets are given to the students in which the student practice and at the same time the system evaluates the students progress.

Analyzing the test results using a relationship rule to suggest certain activity for the user, wherein the relationship rule defines at least a relationship between at least two areas of the subject, (p. 9), discusses the exercise divided into sets of similar subject matter and the subgroup of levels therein.

MC&S fails to disclose with detail the specifics of the review process, yet it specifies that the reviews are individually customized and that the difficulty level plays a role in the process.

Kerwin discloses:

A method comprising after the initial selection and presentation of materials regarding a specific area of the subject to the user, and further after the user has been assessed to have achieved at least a passing grade or to have understood the specific area, selecting one or more other areas of the subject for the user to work on, and after selecting the one or more other areas of the subject for the user to work on, selecting the specific area of the subject for the user to work on for a second time, (fig. 2A-2B and col. 4:63 – col. 5:3), wherein the student is given the material at least a second time after having answered it correctly.

Wherein the specific area has a difficulty level, and the specific area is selected for the user to work on for the second time depending on the difficulty level of the specific area, or wherein the specific area is selected for the user to work on for the second time depending on a level achieved by the user in the assessment of

the user, not just the user being assessed to have achieved at least a passing grade or to have understood the specific area, (col. 4:63 – col. 5:3), suggest that the number of repetitions is calculated by the system by having certain requirements, as is also mentioned by MC&S there is a determination of delaying certain repetitions for reinforcement. A person of ordinary skill in the art upon reading Kerwin would also have recognized that there are a limited number of triggers that could be used to determine the scheduling of the repeated subjects, including but not limited to the already disclosed difficulty levels, skill level attained, criticality of the subject in order to continue to next level or time elapsed since last reviewed. Thus it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to try any number of permutations of triggers in the creation of the scheduled repetitions, in as much as the fact that the system would inherently require a trigger in order to place the repetition in the scheduled studies. Not only a trigger is necessary but it would create the predictable result of delaying the review of the materials to a later time.

2. **Regarding claims 14 and 24;** MC&S discloses wherein the testing on the user comprises testing the user on a plurality of areas of the subject, wherein the subject includes a broad area and a narrow area, with the subject broader than the broad area, and with the broad area broader than the narrow area; and the suggestion can be on the broad area. (p. 6 and 9), wherein the broad subject of Math is broken into 16 subjects called strands and in table 1 showing that each strand is again subdivided into grade levels, and the generation of exercise sets are according to the subject and skill level.

3. **Regarding claims 15 and 25;** MC&S discloses wherein based on the suggestion, materials are presented to the user to allow the user to practice on the subject so as to further enhance the user's understanding in the subject, wherein the method further comprises transmitting at least a portion of the materials via a network to a device to be presented, and wherein the network includes a private network and a public network, (p.

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9), practice exercises generated so that the student may improve his/her skill level, also the fact that the product was developed by Computer Curriculum Corp. and includes a Graphics library implies the use of computer network systems.

4. **Regarding claims 16 and 26;** Kerwin discloses wherein the specific area is selected for the user to work on for the second time without depending on whether the user has been assessed to have achieved a certain satisfactory level of understanding in the one or more other areas, (col. 3:57-59 and col. 4:63 - col. 5:3), wherein the system will repeat the content at least once and up to a selected number regardless of the correct number. Upon reading Kerwin one of ordinary skill in the art at the time of the invention would recognize that reinforcement of known or learnt materials would improve development of new math skills, combining these element would yield the predictable result of MC&S system including reinforcement reviews before raising the difficulty level.

5. **Regarding claims 33-35, 42;** Kerwin discloses:

Wherein the specific area is selected for the second time depending on a time elapsed since the user has been assessed to have achieved at least a passing grade or to have understood the specific area.

Wherein the specific area is selected for the second time depending on the time elapsed being more than a predetermined duration of time.

Wherein the specific area can be selected again, but if the time elapsed is more than a predetermined duration of time, the specific area is not selected again.

As stated above in the rejection of claim 13; col. 4:63 – col. 5:3 of Kerwin suggest a plurality of repetition of the same subject spaced through out time. Thus, it would be obvious to one of ordinary skill in the art at the time of the invention to try any number of the limited choices available to trigger the repetition event. Either one of the limitations of claims 33-35 on the event to occur after a predetermined time period, before the time period or after the time period would be predictable choices available.

6. **Regarding claims 36-37;** Kerwin discloses; wherein the specific area is selected for the second time depending on a level achieved by the user in the assessment of the user, not just the user being assessed to have achieved at least a passing grade or to have understood the specific area; wherein the specific area is selected for the second time if a level achieved by the user in the assessment of the user has not exceeded a predetermined threshold, (p. 6: content of strands), wherein the system is based on advancement of grade levels within strands, as stated in the rejection of claim 13, a person of ordinary skill in the art upon reading Kerwin would also have recognized that there are a limited number of triggers that could be used to determine the scheduling of the repeated subjects, since MC&S discloses grade levels it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to try using achievement level, passing or remaining within the level would be a predictable result for determination of which materials to be repeated and how many times.

7. **Regarding claims 38 and 43;** MC&S discloses a computer method comprising generating materials on the subject for the user to learn, (p. 9: generation of exercises).

8. **Regarding claims 39 and 45;** MC&S discloses wherein the specific area can be repeatedly selected for the user to work on, depending on the number of times the specific area has been previously selected for the user to work on, (p. 10: student resources), the materials are available for the student to review as many times as needed, and the system tracks the number of repeat use to determine difficulty levels.

9. **Regarding claim 40;** MC&S and Kerwin both disclose wherein the specific area is one of the at least two areas of the subject that the relationship rule defines at least a relationship, and wherein the certain activity suggested includes working in an area of the subject that relates the at least two areas of the subject, (col. 3:42-47), Kerwin describes a relationship within the questions presented and looking at MC&S appendix A's exercises one of ordinary skill can observe an incremental difficulty level of associated exercises being presented to the student.

10. **Regarding claims 41 and 46;** MC&S discloses wherein the certain activity suggested includes working in an area of the subject that relates the at least two areas of the subject, (p. 8: fig. 1), shows relationship diagram of math skills strands.

Response to Arguments

11. Applicant's arguments with respect to claims 13-16, 23-26 and 33-46 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANK M. LEIVA whose telephone number is (571)272-2460. The examiner can normally be reached on M-Th 9:30am - 5:pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert E. Pezzuto can be reached on (571) 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

FML 02/26/2008

/Scott E. Jones/

Primary Examiner, Art Unit 3714